

Appln. No.: 10/690,349  
Amendment Dated June 22, 2007  
Reply to Office Action of April 6, 2007

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**Remarks/Arguments:**

Claims 1-30 are pending in the application. Claims 1-16 are withdrawn from consideration as drawn to a non-elected invention.

**35 U.S.C. § 103**

Claims 17-24 and 26-30 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rivera et al. (US 6,126,997; "Rivera"). The Office Action states that Rivera teaches all of the instant claim limitations, with the exception of not teaching the use of both an organo-functional silane AND a group IV-B element in combination with a polymer blend having a plurality of carboxylic and hydroxyl groups, but that Rivera does teach using these individually and that combining them would therefore be *prima facie* obvious. However, Applicants point out that Rivera does not teach or suggest the use of his formulations on metals in general, but only on magnesium or magnesium alloys.

Claims 17 and 26 are amended herewith to recite that the metal surface is selected from the group consisting of aluminum, iron, zinc, and alloys of any of these, as supported in the application on page 4 at lines 13-18. It is well known in the art that various metal treatment compositions exist, and that what works on one metal frequently does not work on another. Rivera mentions only magnesium as being suitable for treatment with his compositions, and does not teach or suggest their suitability for use on any other substrate. Therefore Rivera does not provide all of the claim elements, and a *prima facie* case of obviousness has not been presented. Accordingly, the rejection should be withdrawn.

Claim 25 is rejected under 35 U.S.C. § 103(a) as unpatentable over Rivera as applied to claim 17 above, and further in view of Petrole et al. (US 5,700,523; "Petrole"). The examiner relies upon Petrole to establish that "coatings containing similar components to those disclosed in U.S. 6,126,997 ("Rivera") may successfully be applied to aluminum substrates...". The examiner asserts that, if organofunctional silanes and polymer blends (carboxyl and hydroxyl polymers) are each separately known for treating aluminum, then using a combination of the two would have been obvious because it is obvious to combine two materials that are known to be useful for the same purpose.

However, Petrole does not in fact teach that 1) organofunctional silanes and 2) polymer blends in combination with a group IV-B element as recited are useful for the same purpose. Rather, he teaches that each of these plays a distinct and separate role, and that they must both be applied and that this must be done sequentially. Specifically, Petrole

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always uses a 3-part application process using the sequence 1) silicate, 2) organofunctional silane, and 3) polymer blend in combination with a group IV-B element, and refers to the "three layers" that are formed in this way. (See col. 4, line 60) Petrole states that "The silane layer bonds the subsequently applied organic layer (such as the pretreatment or the paint) to the silicate complexes formed at the metal surface or directly to the metal surface." (See col. 4, line 67 to col. 5, line 3, emphasis added). Thus the organofunctional silane is always applied before the polymer pretreatment comprising a plurality of carboxylic and hydroxyl groups; these two components are never mixed as presently claimed. Certainly Petrole would have been motivated to save a process step by combining the organofunctional silanes and the polymer blend if he had thought that might work, but there is no indication that he had any such idea. In fact, his use of the term "three layers" indicates his understanding that the organofunctional silane should not be pre-mixed with the polymer blend, in direct contrast to the present claims. Thus Petrole does not teach, to a person of ordinary skill, contacting a metal surface with a composition comprising both 1) an organofunctional silane and 2) a polymer blend in combination with a group IV-B element as claimed. Since not all elements are taught, Petrole is deficient as the basis for a *prima facie* § 103 rejection. Thus, the rejection should be withdrawn.

#### Obviousness-Type Double Patenting

Claims 17-24 and 26-30 are rejected on the ground of nonstatutory obviousness-type double patenting as unpatentable over claims 11-15 of Rivera, and claim 25 is similarly rejected over claim 11 of Rivera in view of Petrole. Applicants respectfully traverse these rejections as follows, beginning by providing two passages from the MPEP.

"...a double patenting rejection must rely on a comparison with the claims in an issued or to be issued patent, whereas an obviousness rejection under 35 U.S.C. 102(e)/103(a) relies on a comparison with what is disclosed (whether or not claimed) in the same issued or to be issued patent."<sup>1</sup> [emphasis added]

"Any obviousness-type double patenting rejection should make clear:

(A) The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and

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<sup>1</sup> MPEP 804 III

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(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

When considering whether the invention defined in a claim of an application is an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art."

<sup>2</sup> [emphasis added]

Rivera, and specifically claims 11-15 thereof, does not teach or suggest the use of his compositions for treating aluminum, iron, zinc, or their alloys. In fact, utility is not taught for any substrate other than magnesium or its alloys, a surface that is not included within the scope of the present claims. Thus the Office Action has not provided the claim element relating to the metal surfaces currently recited, and therefore has not set forth "The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent." Accordingly, Applicants submit that the rejection of claims 17-24 and 26-30 has been overcome. Regarding current claim 25, the Office Action has not provided a teaching of the treatment of an aluminum surface with a composition that includes all of the elements recited, and thus rejection of this claim is also improper.

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<sup>2</sup> MPEP 804 B. 1.

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Conclusion

For the above reasons, Applicants submit that the rejections have been overcome, and request reconsideration and allowance of claims 17-30. Applicants invite the examiner to contact their undersigned representative, Frank Tise, if it appears that this would expedite examination.

Respectfully submitted,



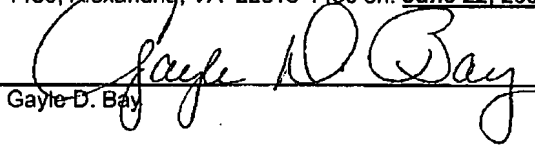
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Dated: June 22, 2007

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Gayle D. Bay